



TOWN OF BELMONT
OFFICE OF COMMUNITY DEVELOPMENT

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INFORMATION ON ATTIC AND BASEMENT EXPANSION

Attic and basement expansion for habitable space must meet the 7th Edition of the Massachusetts State Building Code requirements and the Belmont Zoning Bylaws. The list below addresses some of the most common issues.

Ceiling Heights: Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than seven feet (2134 mm). The required height shall be measured from the finish floor to the lowest projection from the ceiling.

Exceptions:

1. Beams and girders spaced not less than four feet (1219mm) on center may project not more than six inches (152 mm) below the required ceiling height.
2. Ceilings in basements without habitable spaces may project to within six feet, eight inches (2032 mm) of the finished floor; and beams, girders, ducts or other obstructions may project to within six feet, four inches (1931 mm) of the finished floor.
3. Not more than 50% of the required floor area of a room or space is permitted to have a sloped ceiling less than seven feet (2134 mm) in height with no portion of the required floor area less than five feet (1524 mm) in height.
4. Bathrooms shall have a minimum ceiling height of six feet eight inches (2036 mm) over the fixture and at the front clearance area for fixtures as shown in 780 CMR Figure 5307.2. A shower or tub equipped with a showerhead shall have a minimum ceiling height of six feet eight inches (2036 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

Bedrooms: Shall have one openable window or exterior door to permit emergency egress of rescue. The sill height shall be not more than forty-four (44) inches above the finished floor. Windows shall have a minimum net clear opening dimension of 5.7 S.F. (20x24 inches).

Exitway Access: The minimum clear width of a hallway or exitway access shall be three (3) feet. The minimum headroom shall be six (6) feet six (6) inches. Handrails may project from the side of the stairway a distance of 3½ inches. Stair treads must be nine (9) inches minimum and have a maximum rise of 8¼ inches.

Attic Ventilation: Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of the roof rafters, shall have cross ventilation for each separate space by ventilating openings protected against the entrance the entrance of rain and snow.

Window Size: All habitable rooms shall be provided with aggregate glazing area of not less than 8% of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily

controllable by the building occupants. The minimum openable area to the outdoors shall be 4% of the floor area being ventilated.

Exception: The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

Notes: Mechanical ventilation of bathrooms containing a shower or bathtub is required at the ventilation rates noted in 780 CMR 5303.3.

Exception: Exhaust fans are not required by 780 CMR 51.00 through 99.00 in half-bathrooms. (For the purposes of 780 CMR 5303, half-bathrooms are defined as those bathrooms that contain only a toilet and sink.)

Massachusetts State Sanitary Code 105 CMR and/or Massachusetts Fuel Gas and Plumbing Code 248 CMR may require exhaust fans.

Basements: Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with 780 CMR 5310.3. The net clear opening dimensions required by 780 CMR 5310 shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with 780 CMR 5310.2.

If your plans involve work in the attic area and you already have living space on the first and second floors of your home, you must also not exceed the half story definition stated below:

Half Story: A space under a sloping roof where:

- a) the line of intersection of the rafter bottoms and the interior wall surface is not more than three (3) feet above floor level on at least half the perimeter of the second floor.
- b) the potential space having headroom of five (5) feet or more is not more than 60% as large as the second floor.
- c) Provided that the length of any dormer does not exceed 75% of the length of the roofline of the side of the structure where the dormer is constructed, and
- d) For purposes of this calculation, when the height of the second floor is indeterminate, the height of the second floor (from finished floor to finished ceiling) shall be equal to 12 feet, the remaining portion of the wall shall be factored into the half-story calculation.

Note: 1.4 was amended by Article 22 at the 1998 Annual Town Meeting.

Note: 1.4 was further amended by Article 18 at the 2005 Annual Town Meeting.

If you have any questions, please call 617-993-2664 to speak to a Building Inspector before you proceed.